FMCG
TRAINING SOLUTIONS

ACCREDITED BY:

merSETA
MANUFACTURING, ENGINEERING AND RELATED SERVICES SETA

NQF 2
NATIONAL CERTIFICATE: PRODUCTION TECHNOLOGY

SAQA registered qualification ID: 58781

OVERVIEW

This programme will provide learners with a range of learning and skills required to be able to perform a series of activities to support manufacturing, engineering and technological processes. Learners will acquire a range of skills in the identification of production parameters in manufacturing, engineering and technology industries and basic strategies to achieve them.

Learners who achieve this qualification will be able to contribute and function in areas such as production processes, systems and maintenance, quality and occupational health and safety. Learners who will typically embark on this qualification are individuals who have an interest in a career in production technology. The production technology competencies incorporated in this qualification can also be offered as support skills programmes to incumbents in any other manufacturing, engineering and technology field qualifications.

MODULE CONTENT:

FUNDAMENTALS:

NUMERACY:

FOUNDATIONAL PRINCIPLES:

- Use and analyse computational tools and strategies and make estimates and approximations.
- Demonstrate understanding of numbers and relationships among numbers and number systems.
- Convert flexibly between and within various representations of functions.
- Compare, analyse and describe the behaviour of patterns and functions.
- Represent situations mathematically in order to interpret and solve problems.
- Estimate, measure and calculate physical quantities to solve problems in practical situations.
- Explore transformations of two-dimensional geometric figures.

FINANCIAL CALCULATIONS:

- Use mathematics to plan and control personal and/or household budgets and income and expenditure.
- Use simple and compound interest to make sense of and define a variety of situations.
- Investigate various aspects of financial transactions including costs, prices, revenue, cost price, selling price, loss and profit.

STATISTICAL ANALYSIS:

- Organise and represent data by applying various techniques in order to model situations.
- Give opinions on the implications of the modelled data for the required purpose.

COMMUNICATION:

READING SKILLS:

- Use a range of reading and/or viewing strategies to understand the meaning of specific texts.
- Identify the main ideas in different text types.
- Read/view and respond to texts for a variety of purposes.
- Identify and discuss how language structures and features may influence a reader/audience.

WRITTEN COMMUNICATION:

- Write/sign for a specific purpose, audience and context.
- Use grammatical structures and writing/signing conventions to produce coherent and cohesive texts for specific contexts.
- Adapt language to suit context.
- Draft and edit own writing/signing.

SPOKEN COMMUNICATION:

- Use a variety of strategies to maintain communication.
- Adapt language to accommodate socio-cultural sensitivities without losing own meaning.
- Use knowledge of language structures and conventions to shape or decode meaning of unfamiliar vocabulary or constructions.
- Organise and present information in a focused and coherent manner.
- Identify and explain how speakers/signers influence audiences.

OCCUPATIONAL/BUSINESS COMMUNICATION:

- Find and use suitable learning resources.
- Use learning strategies.
- Manage occupational learning programme materials.
- Plan and gather relevant information for use in a given context
- Function in a team.
- Reflect on how characteristics of the workplace and occupational context affect learning.

CORE AND ELECTIVES:

OPERATIONAL AND OPTIMISATION:

- Frame and implement an individual action plan to improve productivity within an organisational unit.
- Identify and describe inputs, outputs, stages and quality indicators of the manufacturing, assembly or engineering process.
- Count stock for a stock-take.
- Supply raw and processed material to production line.
- Explain and use organisational procedures.

HOUSEKEEPING, SAFETY AND QUALITY:

- Identify potential hazards and critical safety issues in the workplace.
- Apply health and safety to a work area.
- Keep the work area safe and productive.
- Monitor the quality of the input materials and the manufactured plastic product.
- Orientate self in the workplace.
- Carry out good housekeeping routines.
- Prepare workstation for safe and effective production.
- Comply with relevant housekeeping policies and procedures.
- Maintain effective working conditions.
- Explain different types of emergencies that may be encountered in a workplace.
- Explain various responses to an alarm.
- Explain actions required of a safety officer in an assembly area.
- Explain the functions of an emergency control centre.
- Understand and deal with HIV/AIDS.

ROUTINE MAINTENANCE:

- Plan and prepare for routine maintenance
- Monitor the condition of machinery and equipment.
- Perform routine maintenance.
- Apply quality checks on completed work.
- Care for and store routine maintenance tools and equipment.
- Report on machine and equipment condition.
- Discuss and explain incidents and problems related to performing routine maintenance.
- Work safely with due care for self, fellow workers, equipment, materials and the environment.

ENGINEERING DRAWINGS AND TOOLS:

- Demonstrate an understanding of basic engineering drawings, sketches and material lists.
- Interpret basic engineering drawings and sketches.
- Select components from engineering drawings.
- Select and use engineering hand tools.
- Care for and maintain engineering hand tools.
- Work safely with due care for self, fellow workers, equipment, materials and the environment.

UNIT STANDARDS:

		ID	UNIT STANDARD TITLE	NQF LEVEL	CREDITS	DURATION
FUNDMANETALS	Numeracy	7469	Use mathematics to investigate and monitor the financial aspects of personal and community life	2	3	10 DAYS
		7480	Demonstrate understanding of rational and irrational numbers and number systems	2	2	
		9007	Work with a range of patterns and functions and solve problems	2	5	
		12444	Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts	2	3	
		9009	Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	2	3	
	Communication	119454	Maintain and adapt oral/signed communication	2	5	
		119456	Write/ present for a defined context	2	5	
		119460	Use language in occupational learning programmes	2	5	
		119463	Access and use information from texts	2	5	
OPERATIONAL & OPTIMISATION	Core	14445	Frame and implement an individual action plan to improve productivity within an organisational unit	1	3	10 DAYS
	Core	13162	Identify and describe inputs, outputs, stages and quality indicators of the manufacturing, assembly or engineering process	1	10	
	Core	114891	Count stock for a stock-take	2	5	
	Core	12667	Supply raw and processed material to production line	2	3	
	Core	376925	Explain and use organisational procedures	3	6	
HOUSEKEEPING, SAFETY AND QUALITY	Core	13167	Identify potential hazards and critical safety issues in the workplace	1	2	15 DAYS
	Core	9964	Apply health and safety to a work area	2	3	
	Core	13220	Keep the work area safe and productive	2	8	
	Core	119139	Monitor the quality of the input materials and the manufactured plastic product	2	12	
	Core	246449	Orientate self in the workplace	2	6	
	Elect	117416	Comply with good housekeeping practices	2	4	
	Elect	259597	Deal with safety, health and environmental emergencies in the workplace	2	3	
	Core	12463	Understand and deal with HIV/AIDS	2	3	
MAINTE-NANCE	Core	13221	Perform routine maintenance	2	8	5 DAYS
ENGINEERING DRAWINGS & TOOLS	Elect	9882	Read and interpret basic engineering drawings	2	8	
	Elect	119744	Select, use and care for engineering hand tools	2	8	
					Min. 125 credits	**40 DAYS**